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(56) Documents Cited by ISA

Nature Genet; Vol 24, pp 180-183 (Feb 2000). Tavernarakis et al Biochm Biophys Res Comm; Vol 263, pp 156-161 (1999). Wargelius et al

Dev Biol; Vol 224, pp 20-28 (Aug 2000). Oates et al Curr Opin Genet Dev; Vol 10, pp 211-216 (Apr 2000).

Birchler et al

Curr Opin Genet Dev; Vol 10, pp 638-643 (2000).

Cogoni et al

Antisense Nucl Acid Drug Dev; Vol 9, pp 241-252

Plant Mol Biol; Vol 43, pp 295-306 (2000). Marathe et al

FEBS; Vol 479, pp 79-82 (Aug 2000). Ui-Tei et al

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(54) Abstract Title Genetic silencing

(57) The present invention relates generally to a method of inducing, promoting or otherwise facilitating a change in the phenotype of an animal cell or group of animal cells including a animal comprising said cells. The modulation of phenotypic expression is conveniently accomplished via genotypic manipulation through such means as reducing translation of transcript to proteinaceous product. The ability to induce, promote or otherwise facilitate the silencing of expressible genetic sequences provides a means for modulating the phenotype in, for example, the medical, veterinary and the animal husbandry industries. Expressible genetic sequences contemplated by the present invention including not only genes normally resident in a particular animal cell (i.e. indigenous genes) but also genes introduced through recombinant means or through infection by pathogenic agents such as viruses.

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